

METHODOLOGY

The LRP uses a traditional mission analysis to break down the Vision for 2020 into specified objectives and implied elements/tasks. These tasks and objectives led to the development of operational capabilities, CONOPS, organizations and partnerships which formed the basis for the integrated roadmaps.

Figure 3-1 depicts an example of the specified objectives and implied elements within Control of Space.

During the mission area analysis, each of the 11 USSPACECOM's Mission Area Assessment Working Groups developed future operational capabilities, CONOPS, and organizations needed to support the implied tasks.

These 11 working groups consist of mission-area experts from USSPACECOM's Directorates and Components complemented by area experts from DoD, the national community, labs, and industry. The Mission Area Assessment Working Groups are:

- Space Control
- Navigation
- Warning and Assessment
- Meteorological and Oceanographic
- Communications
- Reconnaissance and Surveillance
- Force Application
- Spacelift
- Earth Resource Monitoring
- Command and Control
- Satellite Operations

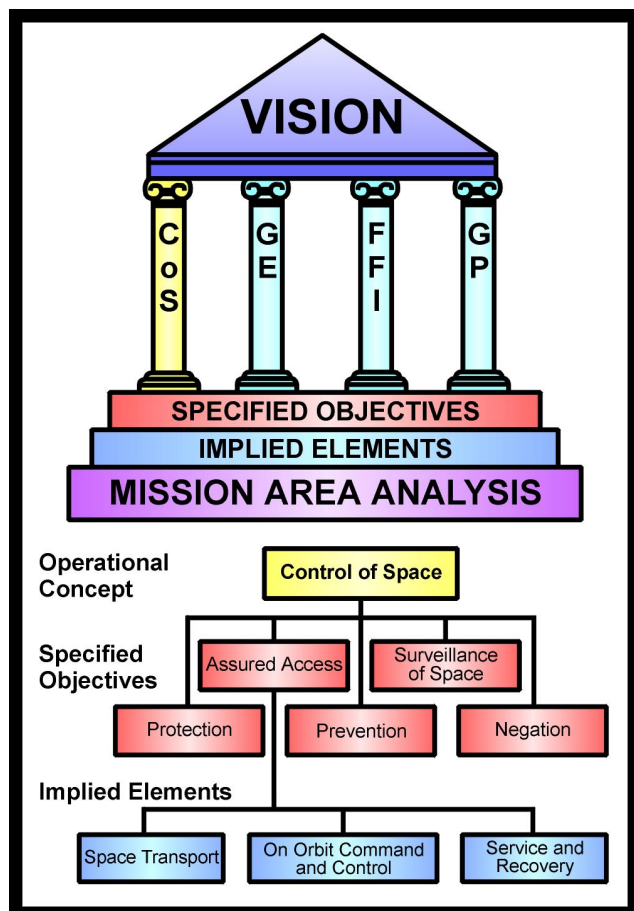


Figure 3-1 Specified Objectives and Implied Elements

Once the working groups established future operational capabilities, they built detailed roadmaps that included endstate goals, programmed and planned systems and candidate technologies (provided by the components), CONOPS, and organizations to support warfighting capabilities. They also assessed (rating red, yellow, green) how well each capability would meet the 2020 goal. These roadmaps became the building blocks for integration in the LRP.

Mission area analyses laid out 136 future capabilities (and accompanying roadmaps and assessments), 65 supporting CONOPS, and 22 proposed organizations—building blocks of the LRP.

To integrate these building blocks, USSPACECOM Directors (Flag Officers) were appointed as Operational Concept Integrators (OCIs) to champion each of USSPACECOM's four operational concepts.

Each OCI developed a comprehensive strategy and integrated roadmaps to 2020. Figure 3-2 depicts the downward decomposition and the upward integration of this methodology. Chapters 5-8 discuss each operational concept in detail.

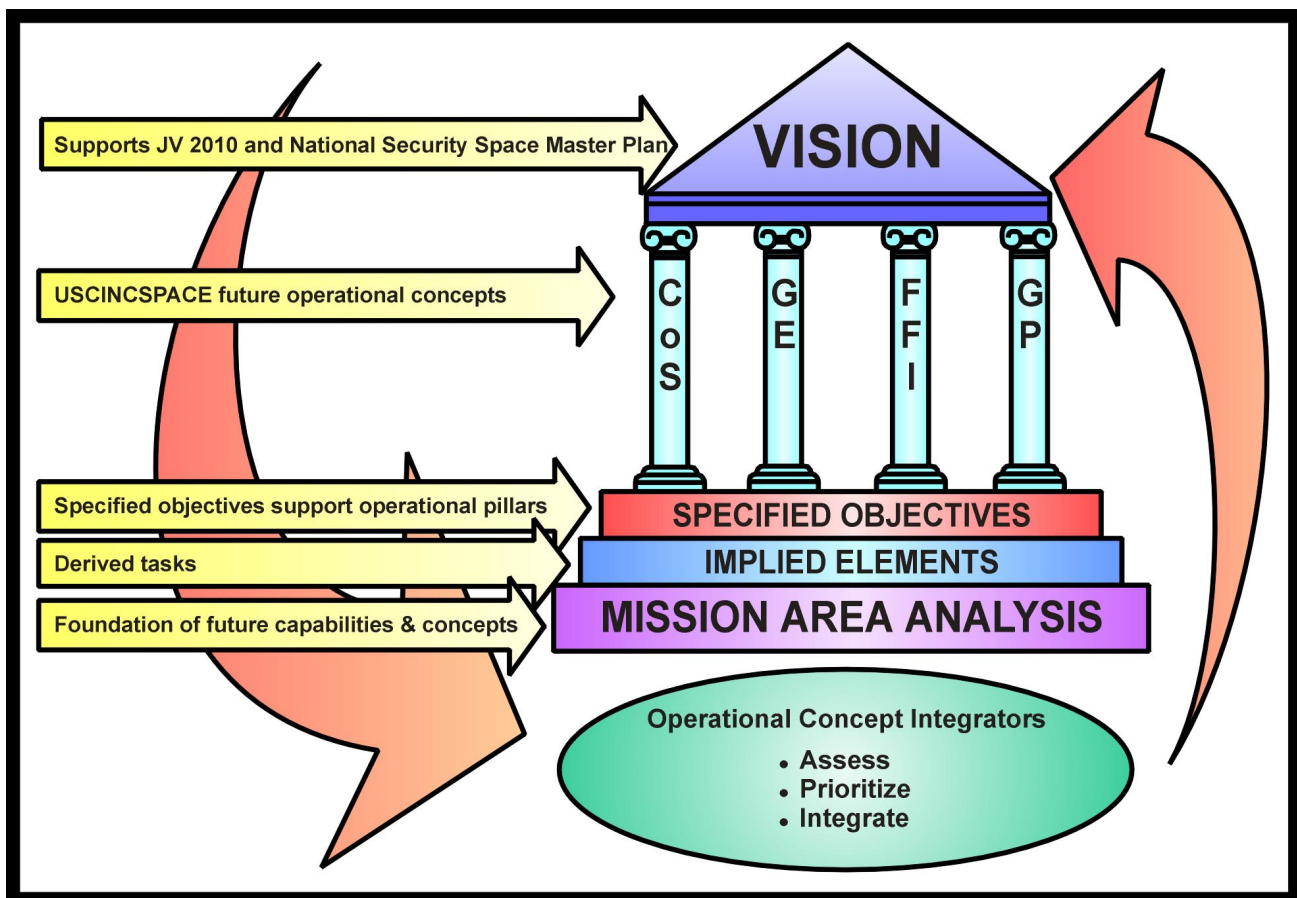


Figure 3-2 Top-Down and Bottom-Up Approach

The OCI's primary mission was to integrate, assess, and rank order the building blocks from the working groups' analyses, thus producing roadmaps for all specified objectives. These integrated roadmaps became the blueprints for attaining the operational concept. They delineated the key

capabilities and their supporting concepts, organizations, and partnership opportunities. Figure 3-3 exemplifies this "necking down" for key capabilities, using Surveillance of Space (specified objective) within Control of Space (operational concept).

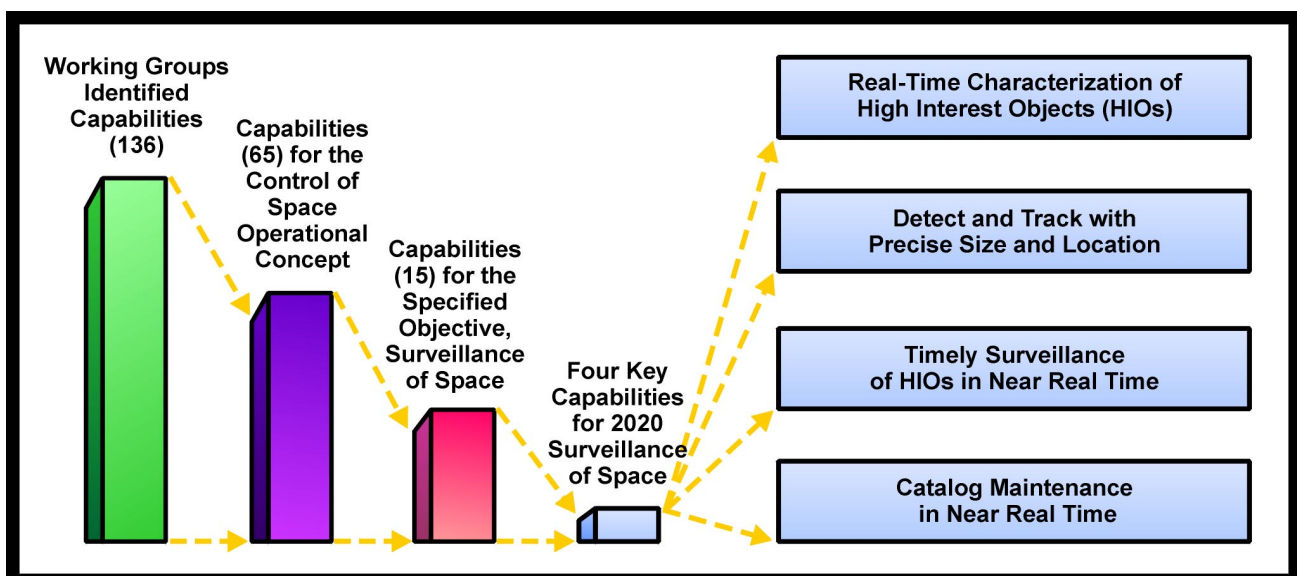


Figure 3-3 Key Capabilities for Surveillance of Space

At this point, we had to evaluate USSPACECOM's status in relation to the 2020 goal, so the Components' inputs to the roadmaps were critical. We correlated programmed and planned systems against each of the key capabilities, which displayed for the first time, a snapshot of all the Components' and other agencies' systems against the space-warfighting capabilities required for 2020.

Along with the programmed and planned systems, the roadmaps incorporate CONOPS, organizations, partnering opportunities, and candidate technologies. Putting them all together showed where the operational concept stands today in relation to the desired end states for 2020: red doesn't meet goals, yellow partially meets goals, and green meets goals (see Figure 3-4). Each OCI then developed directives (to USSPACECOM staff and Components) and recommendations (to other organizations) for each specified objective. Lastly, to focus future efforts, each OCI prioritized the key capabilities, resulting in a final list of critical ones (about one-third of all key capabilities).

The LRP is the first step toward attaining the USSPACECOM Vision for 2020. It will forge a unified

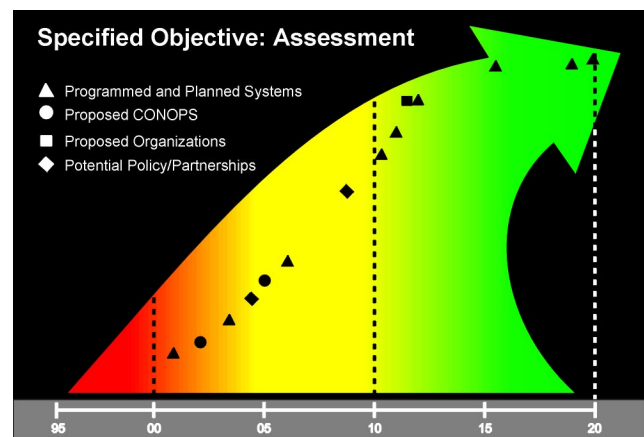


Figure 3-4 Assessment Scoring

effort among USSPACECOM, the Components, and we expect, the entire space community. Ultimately, it will guide USSPACECOM's influence on the DoD's Planning, Programming, and Budgeting System; Requirements Generation System; technology funding; organizational change; and the development of policy, treaties, and agreements. We will continually refine the LRP to improve it. Changes in the command's Vision, the threat, and technology will drive future revisions.

OPERATIONAL CONCEPT OVERVIEW

The USSPACECOM Vision for 2020 provides broad overarching guidance and definition of the four operational concepts (Figure 4-1). Each of these operational concepts is discussed in significantly greater depth and detail in the following four chapters. Each operational concept identifies an end state and then discusses the operational concept in terms of the supporting objectives specified in the Vision. Each supporting objective is discussed in terms of key tasks and supporting key capabilities. Then each operational concept develops roadmaps (emphasizing future

operational capabilities, concepts of operations, organizations and partnership opportunities). Finally, an overall assessment, directives and recommendations, and a listing of prioritized capabilities are provided.

The upcoming operational concept discussion will be discussed in the following order:

- Control of Space
- Global Engagement
- Full Force Integration
- Global Partnerships

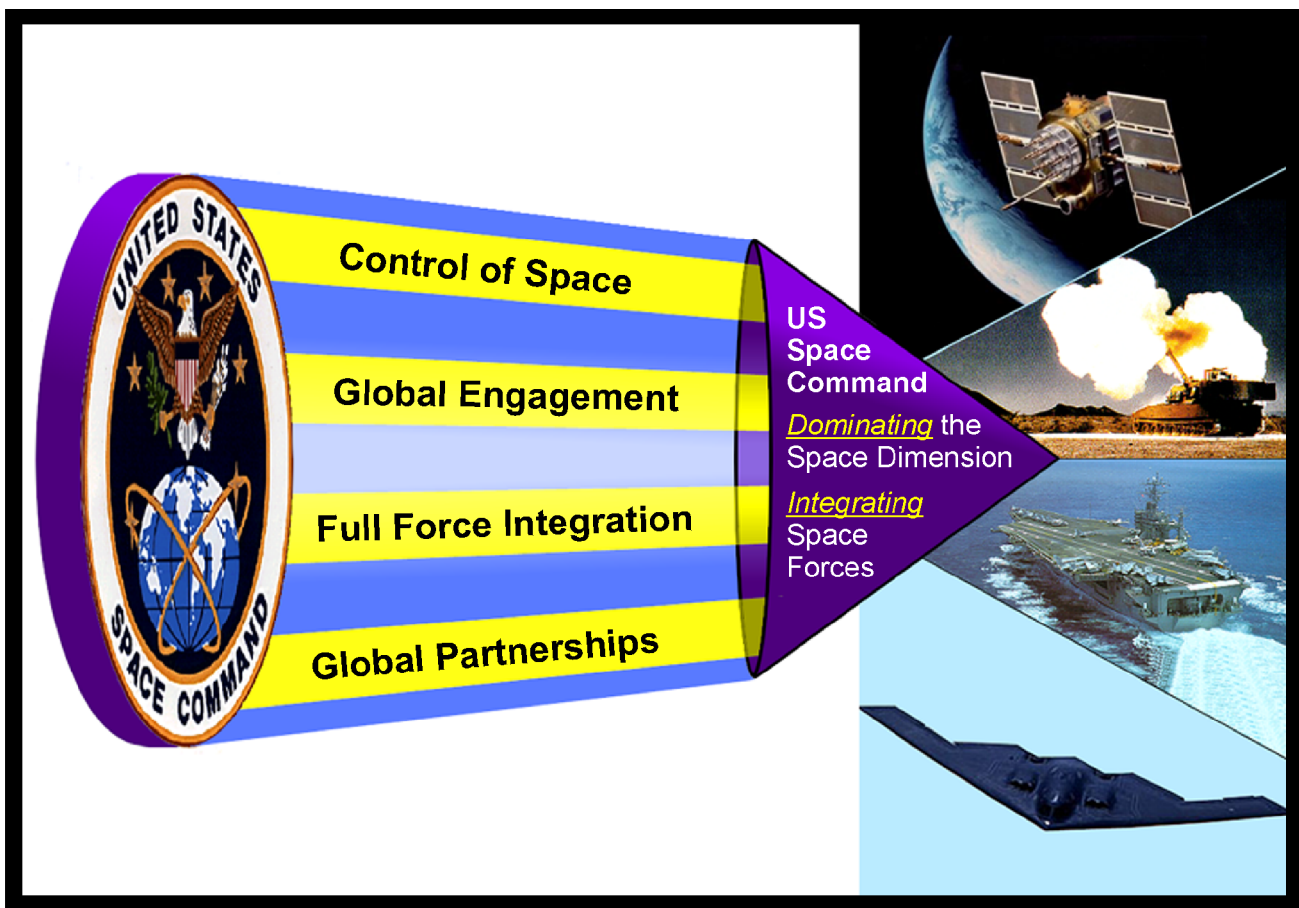


Figure 4-1 Operational Concepts for USSPACECOM's Vision 2020